FIG.1

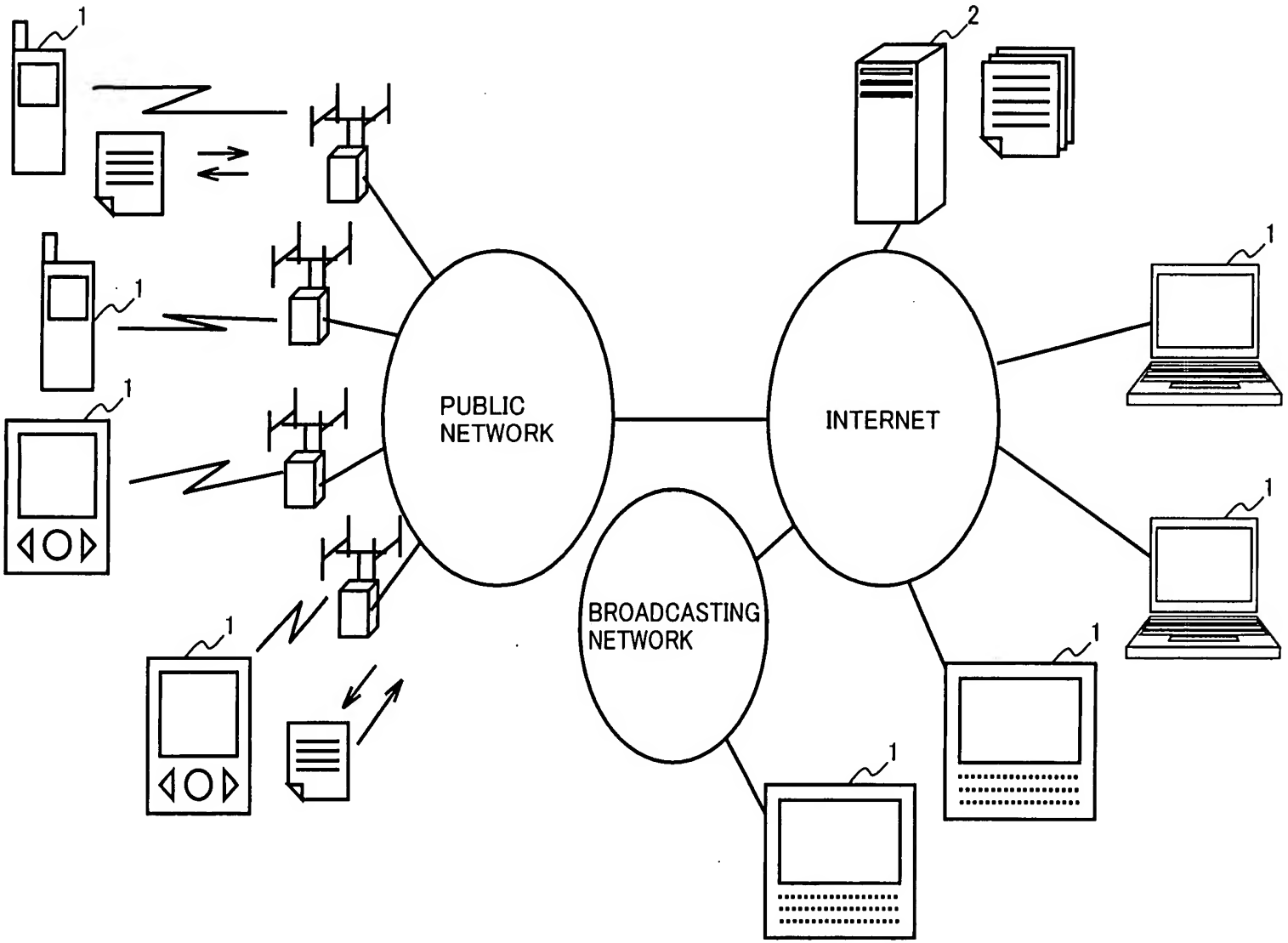

FIG.2

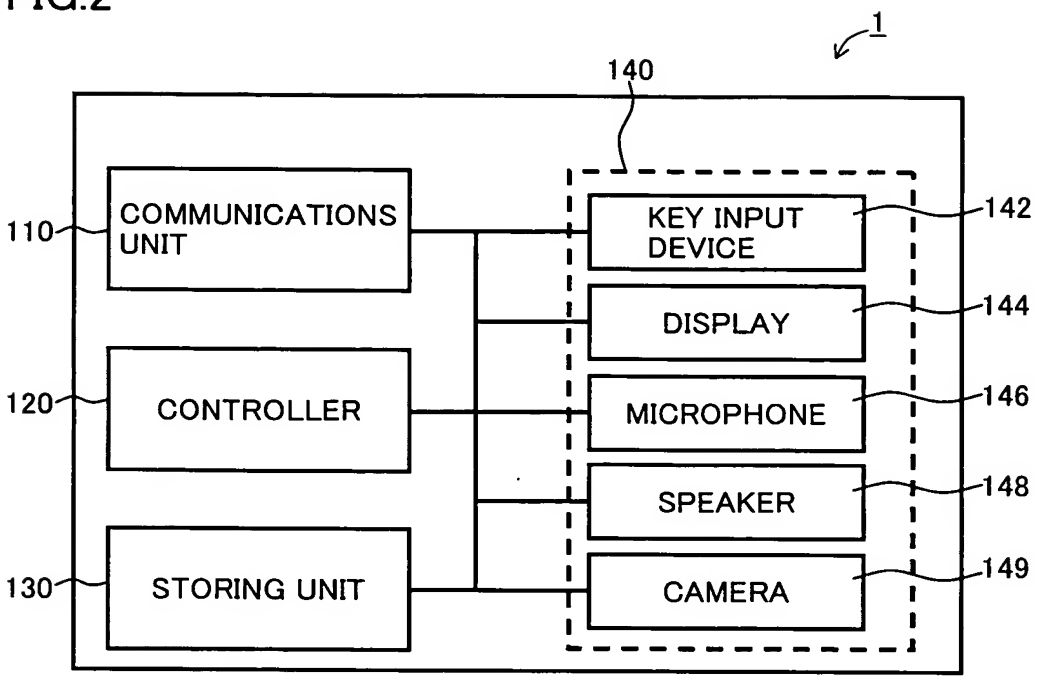
1
140
110
COMMUNICATIONS UNIT
120
CONTROLLER
130
STORING UNIT
KEY INPUT DEVICE
142
DISPLAY
144
MICROPHONE
146
SPEAKER
148
CAMERA
149

FIG.3

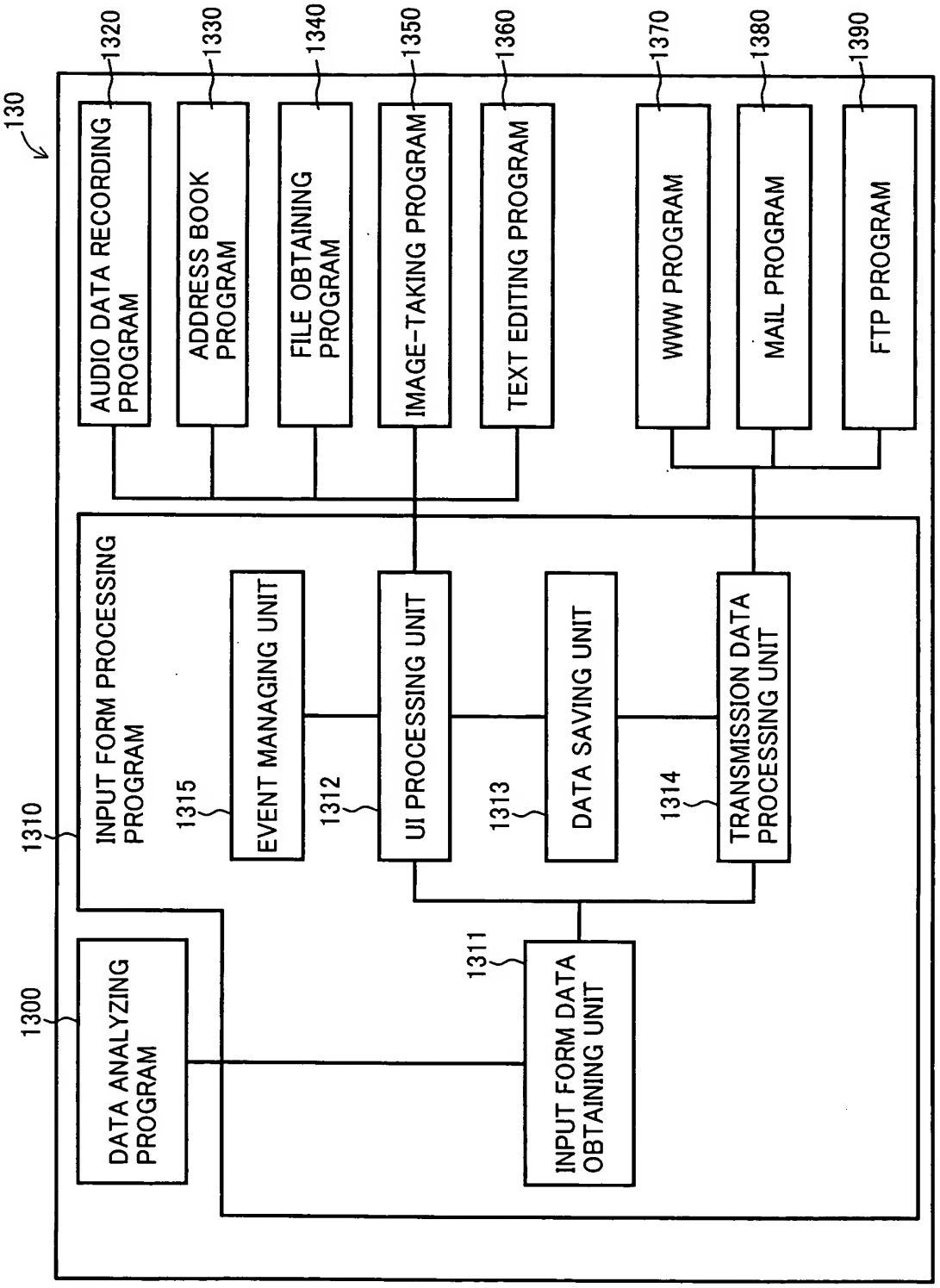
130
AUDIO DATA RECORDING PROGRAM
1320
ADDRESS BOOK PROGRAM
1330
FILE OBTAINING PROGRAM
1340
IMAGE-TAKING PROGRAM
1350
TEXT EDITING PROGRAM
1360
WWW PROGRAM
1370
MAIL PROGRAM
1380
FTP PROGRAM
1390
INPUT FORM PROCESSING PROGRAM
1310
EVENT MANAGING UNIT
1315
UI PROCESSING UNIT
1312
DATA SAVING UNIT
1313
TRANSMISSION DATA PROCESSING UNIT
1314
DATA ANALYZING PROGRAM
1300
INPUT FORM DATA OBTAINING UNIT
1311

FIG.4

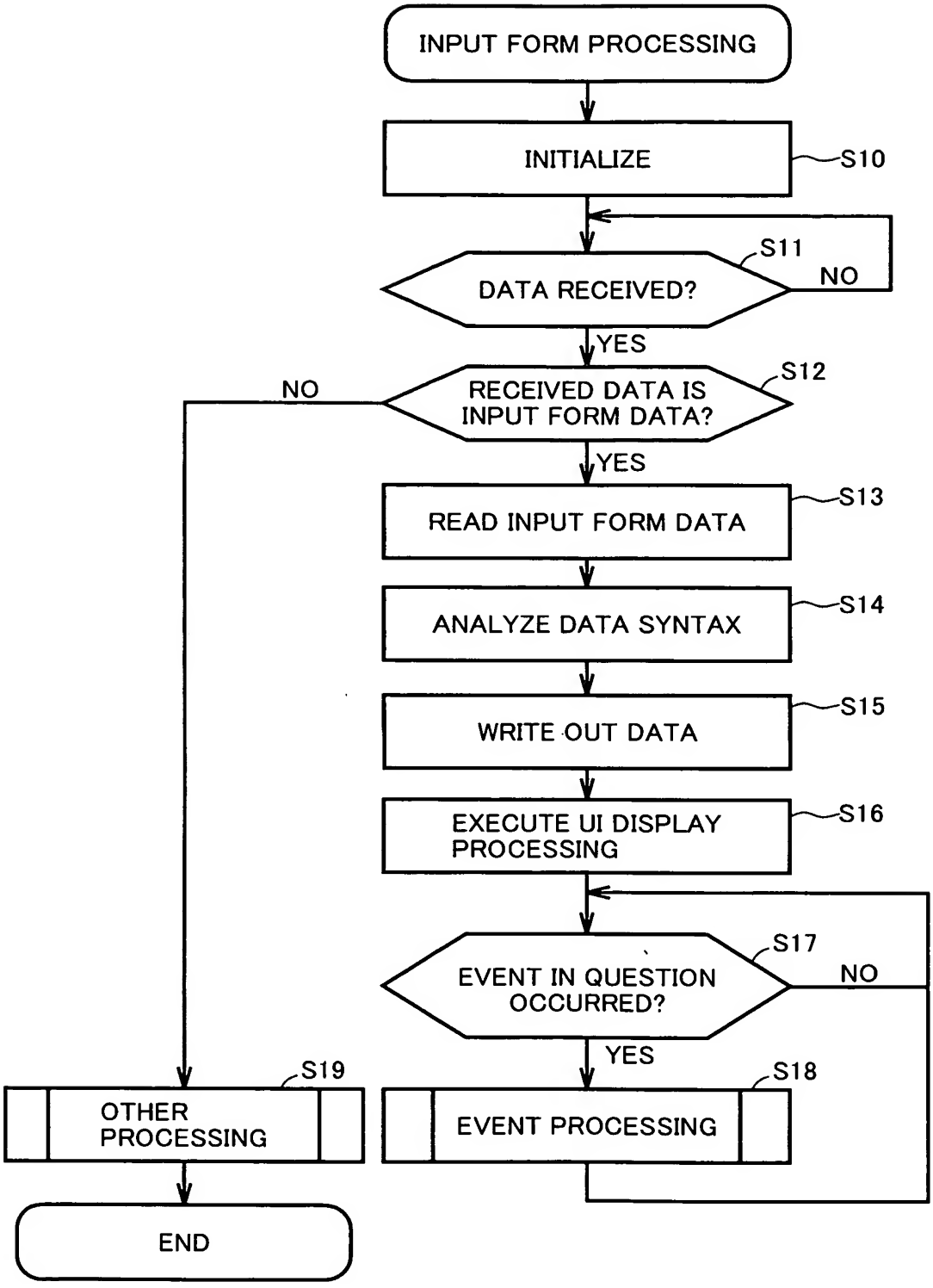
INPUT FORM PROCESSING
INITIALIZE
S10
DATA RECEIVED?
S11
NO
YES
RECEIVED DATA IS INPUT FORM DATA?
S12
NO
YES
READ INPUT FORM DATA
S13
ANALYZE DATA SYNTAX
S14
WRITE OUT DATA
S15
EXECUTE UI DISPLAY PROCESSING
S16
EVENT IN QUESTION OCCURRED?
S17
NO
YES
OTHER PROCESSING
S19
EVENT PROCESSING
S18
END

FIG.5

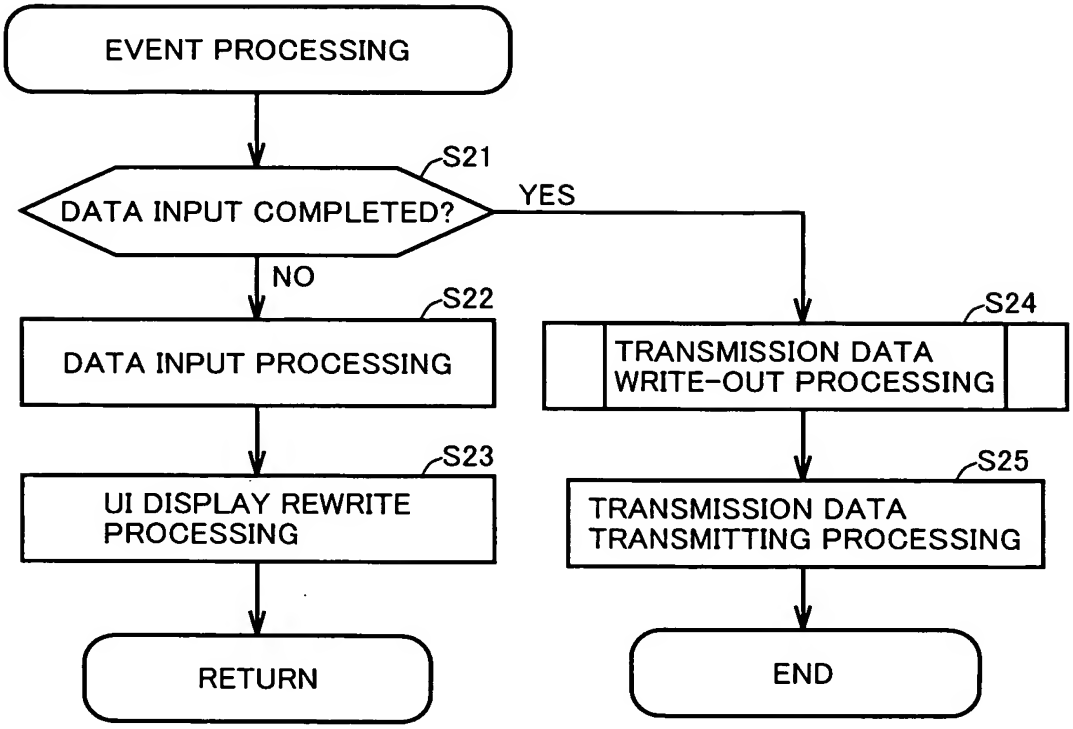
EVENT PROCESSING
S21
DATA INPUT COMPLETED?
YES
NO
S22
DATA INPUT PROCESSING
S23
UI DISPLAY REWRITE PROCESSING
RETURN
S24
TRANSMISSION DATA WRITE-OUT PROCESSING
S25
TRANSMISSION DATA TRANSMITTING PROCESSING
END

FIG.6

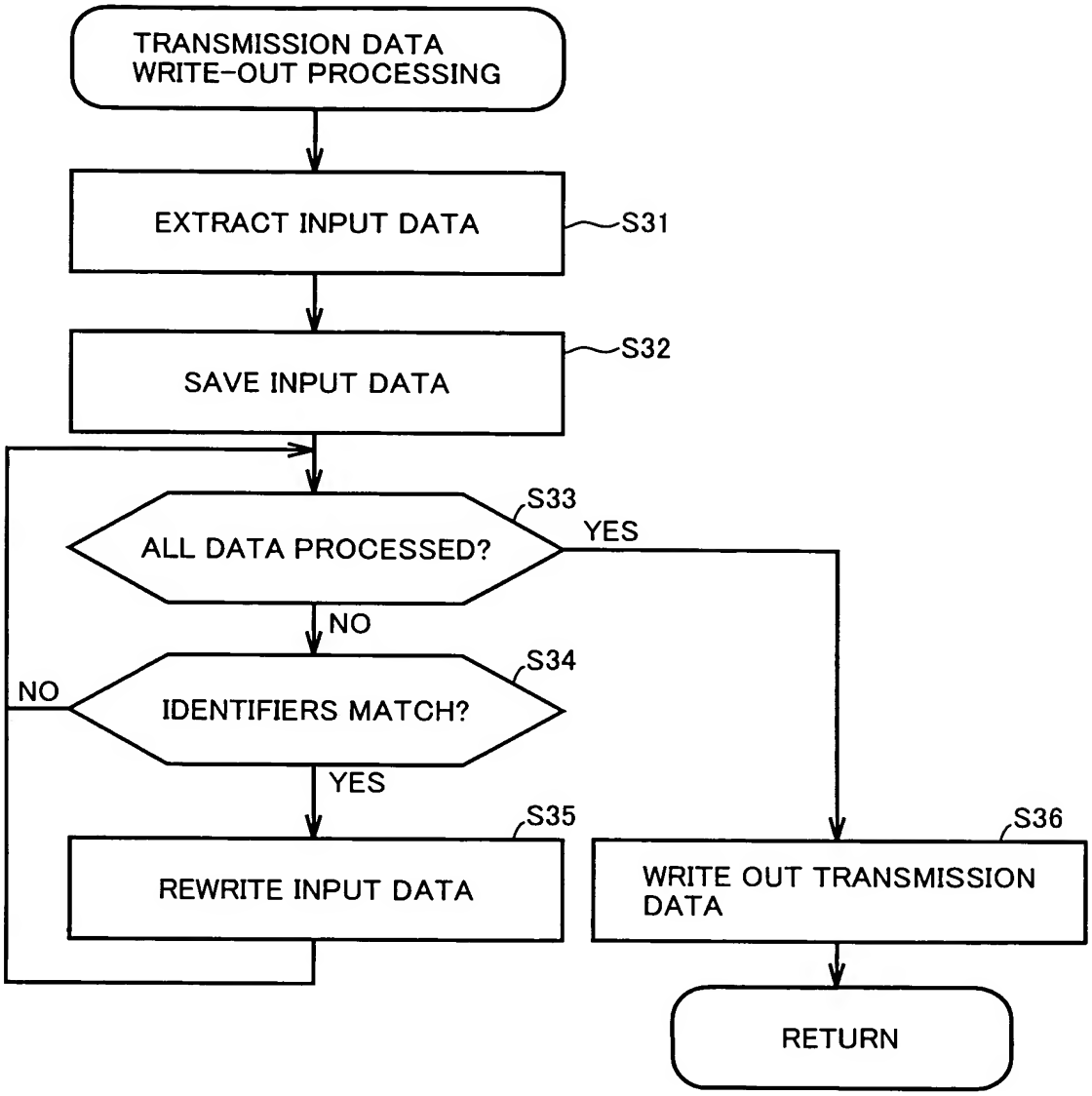
TRANSMISSION DATA WRITE-OUT PROCESSING
EXTRACT INPUT DATA
S31
SAVE INPUT DATA
S32
ALL DATA PROCESSED?
S33
YES
NO
IDENTIFIERS MATCH?
S34
NO
YES
REWRITE INPUT DATA
S35
WRITE OUT TRANSMISSION DATA
S36
RETURN

FIG.7

```
1.  <xhtml>
2.  <head>
3.    <title>PRIZE COMPETITION ENTRY FORM</title>
4.  </head>
5.  <body>
6.    <form>
7.      <NAME> <br />
8.      (LAST NAME)<input type="text" name="last_name" /><br />
9.      (FIRST NAME)<input type="text" name="first_name" /><br />
10.     <SEX> <br />
11.     <input type="radio" name="sex" value="male" />MALE
12.     <input type="radio" name="sex" value="female" />FEMALE
13.     <AGE> <br />
14.     <input type="text" name="age" size="2" />YEARS<br />
15.     <MAIL ADDRESS> <br />
16.     <input type="text" name="mail" /><br />
17.     <ZIP CODE> <br />
18.     <input type="text" name="zip1" size="3" />—
19.     <input type="text" name="zip2" size="4" /><br />
20.     <ADDRESS> <br />
21.     <textarea name="address" cols="30" rows="2">
22.     </textarea>
23.   </form>
24. </body>
25. </xhtml>
```

FIG.8

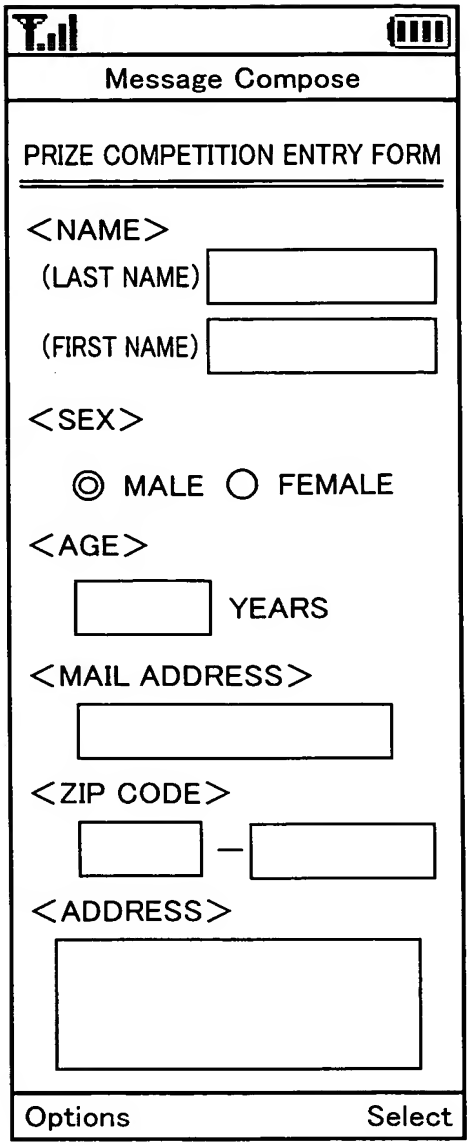
Message Compose
PRIZE COMPETITION ENTRY FORM
<NAME>
(LAST NAME)
(FIRST NAME)
<SEX>
◎ MALE ○ FEMALE
<AGE>
YEARS
<MAIL ADDRESS>
<ZIP CODE>
<ADDRESS>
Options
Select

FIG.9

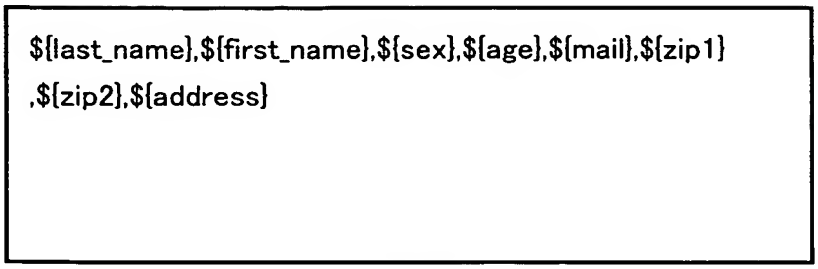
${last_name},${first_name},${sex},${age},${mail},${zip1}
,${zip2},${address}

FIG.10

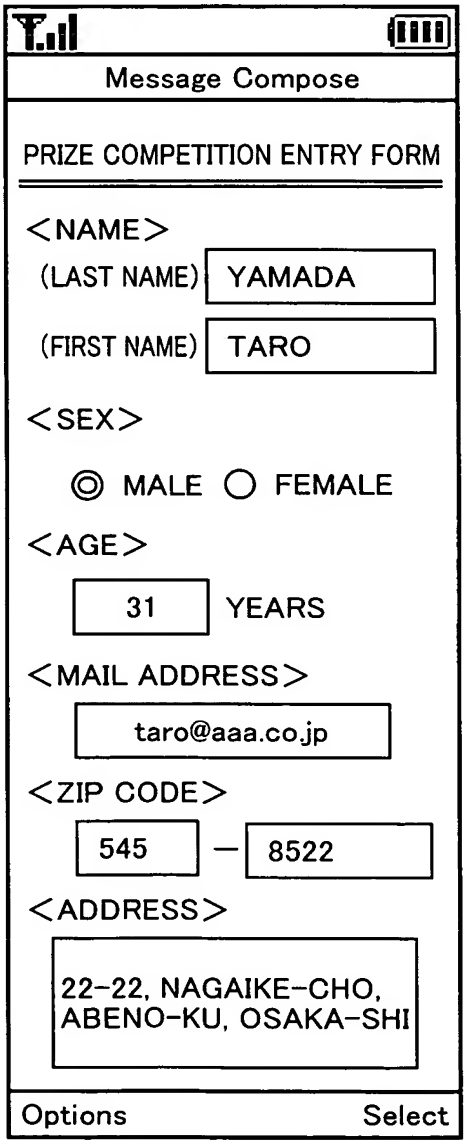
Message Compose
PRIZE COMPETITION ENTRY FORM
<NAME>
(LAST NAME) YAMADA
(FIRST NAME) TARO
<SEX>
◎ MALE ○ FEMALE
<AGE>
31 YEARS
<MAIL ADDRESS>
taro@aaa.co.jp
<ZIP CODE>
545 — 8522
<ADDRESS>
22-22, NAGAIKE-CHO,
ABENO-KU, OSAKA-SHI
Options
Select

FIG.11

ATTRIBUTE NAME	VALUE
last_name	YAMADA
first_name	TARO
sex	male
age	31
mail	taro@aaa.co.jp
zip1	545
zip2	8522
address	22-22, NAGAIKE-CHO, ABENO-KU, OSAKA-SHI

FIG.12

YAMADA, TARO, male, 31, taro@aaa.co.jp, 545
, 8522, 22-22, NAGAIKE-CHO, ABENO-KU, OSAKA-SHI

FIG.13

http://www.AAA.co.jp/prize/ get
${message}

FIG.14

URI SCHEME	METHOD	TRANSMISSION METHOD
http:	get	GET METHOD OF HTTP PROTOCOL (TRANSMITTED WITH ENCODED URL)
	put	PUT METHOD OF HTTP PROTOCOL
	post	POST METHOD OF HTTP PROTOCOL
mailto:		SMTP PROTOCOL (HANDLING FILE (IF PRESENT) AS ATTACHMENT)
ftp		FTP PROTOCOL

FIG.15

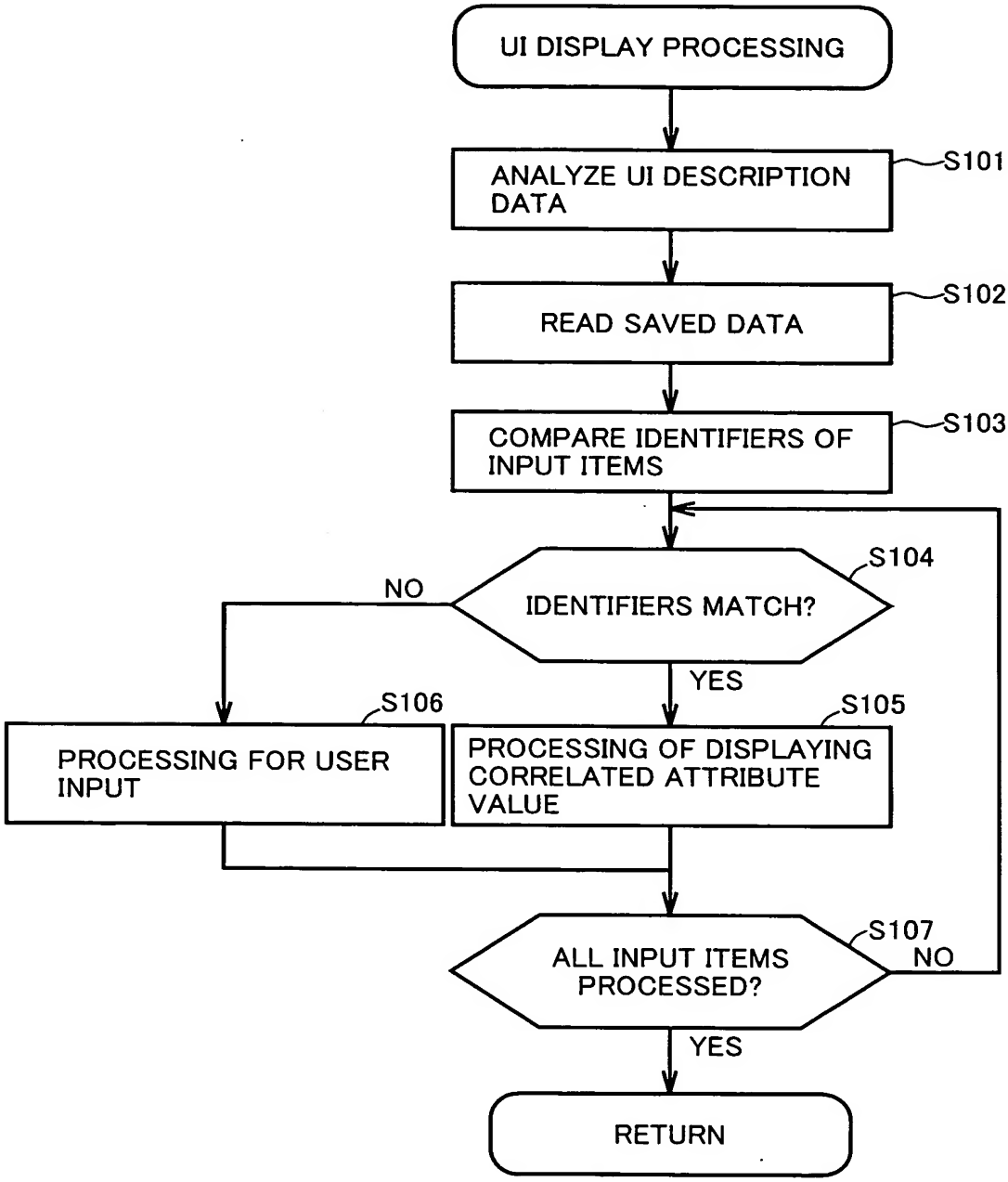
UI DISPLAY PROCESSING
ANALYZE UI DESCRIPTION DATA
S101
READ SAVED DATA
S102
COMPARE IDENTIFIERS OF INPUT ITEMS
S103
IDENTIFIERS MATCH?
S104
NO
YES
PROCESSING FOR USER INPUT
S106
PROCESSING OF DISPLAYING CORRELATED ATTRIBUTE VALUE
S105
ALL INPUT ITEMS PROCESSED?
S107
NO
YES
RETURN

FIG.16

```
1.  <xhtml>
2.  <head>
3.    <title>PRIZE COMPETITION ENTRY FORM</title>
4.  </head>
5.  <body>
6.    <form>
7.      <NAME> <br />
8.      (LAST NAME)<input type="text" name="last_name" /><br />
9.      (FIRST NAME)<input type="text" name="first_name" /><br />
10.     <SEX> <br />
11.     <input type="radio" name="sex" value="male" />MALE
12.     <input type="radio" name="sex" value="female" />FEMALE
13.     <AGE> <br />
14.     <input type="text" name="age" size="2" />YEARS<br />
15.     <MAIL ADDRESS OF CELLULAR PHONE> <br />
16.     <input type="text" name="mail" /><br />
17.     <ZIP CODE> <br />
18.     <input type="text" name="zip1" size="3" />—
19.     <input type="text" name="zip2" size="4" /><br />
20.     <ADDRESS> <br />
21.     <textarea name="address" cols="30" rows="2">
22.     </textarea>
23.   </form>
24. </body>
25. </xhtml>
```

FIG.17

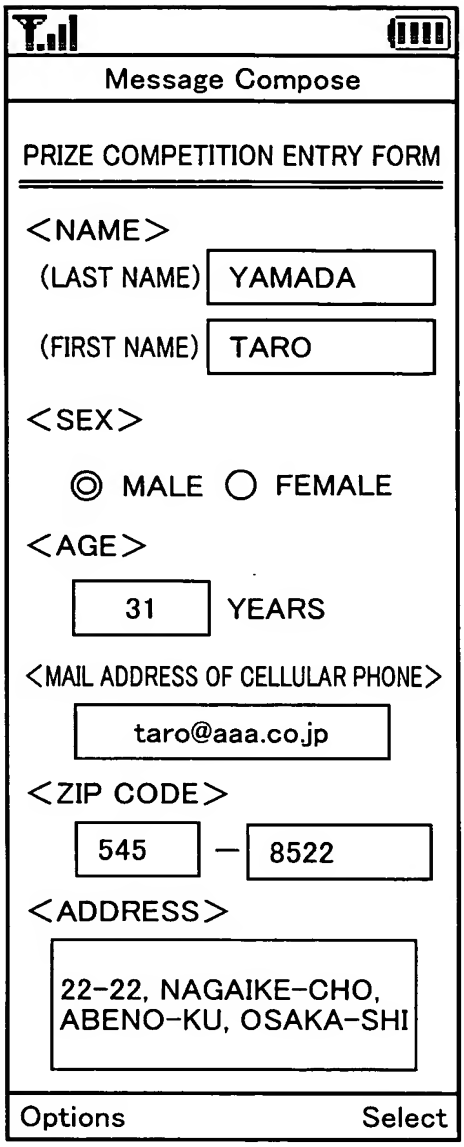
Message Compose
PRIZE COMPETITION ENTRY FORM
<NAME>
(LAST NAME) YAMADA
(FIRST NAME) TARO
<SEX>
◎ MALE ○ FEMALE
<AGE>
31 YEARS
<MAIL ADDRESS OF CELLULAR PHONE>
taro@aaa.co.jp
<ZIP CODE>
545 — 8522
<ADDRESS>
22-22, NAGAIKE-CHO,
ABENO-KU, OSAKA-SHI
Options
Select

FIG.18

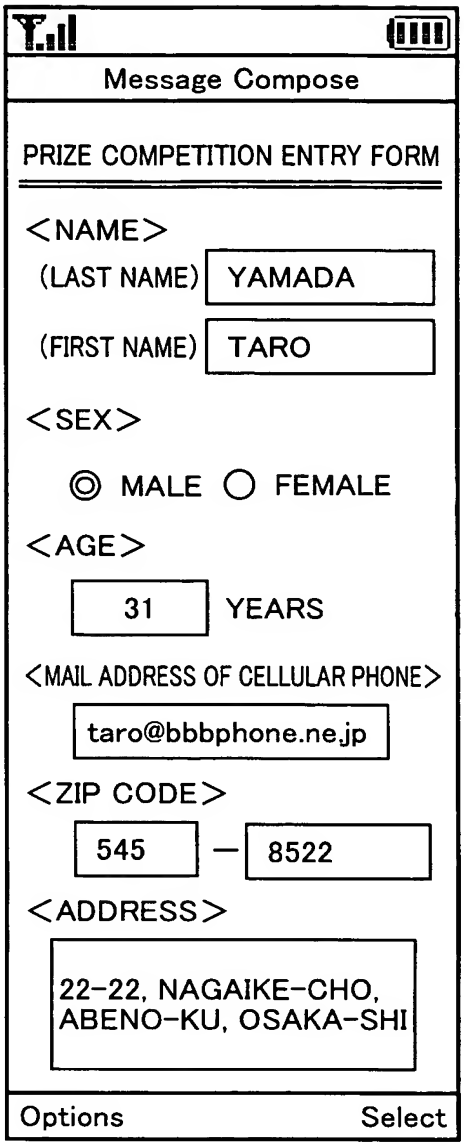

FIG.19

YAMADA, TARO, male, 31, taro@bbbphone.ne.jp, 545
, 8522, 22-22, NAGAIKE-CHO, ABENO-KU, OSAKA-SHI

FIG.20

ATTRIBUTE NAME	VALUE
last_name	YAMADA
first_name	TARO
	HANAKO
	JIRO
sex	male
	female
age	31
	28
	25
mail	taro@aaa.co.jp
	hanako@aaa.co.jp
	jiro@aaa.co.jp
zip1	545
zip2	8522
address	22-22, NAGAIKE-CHO, ABENO-KU, OSAKA-SHI

FIG.21

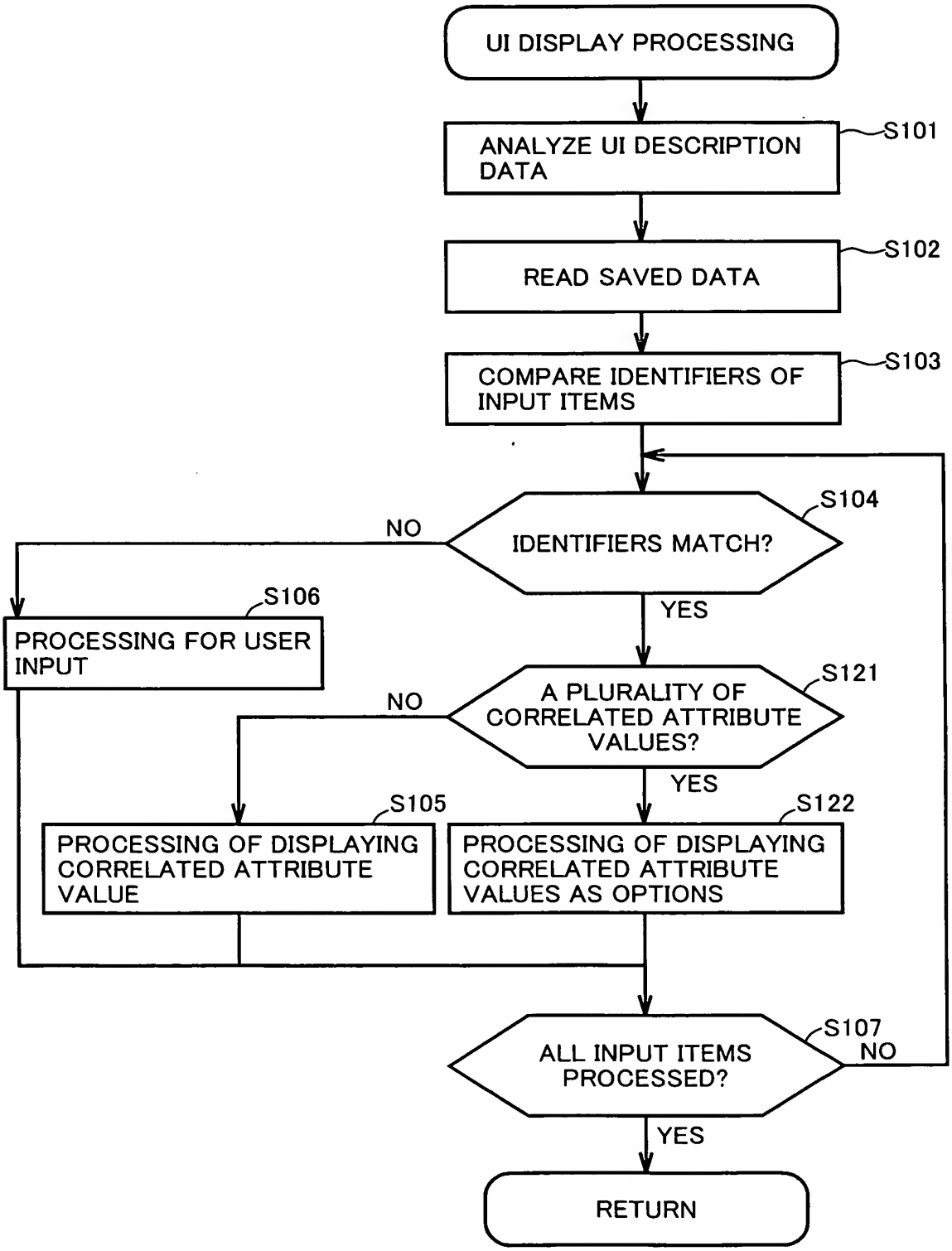
UI DISPLAY PROCESSING
ANALYZE UI DESCRIPTION DATA
S101
READ SAVED DATA
S102
COMPARE IDENTIFIERS OF INPUT ITEMS
S103
IDENTIFIERS MATCH?
S104
NO
YES
PROCESSING FOR USER INPUT
S106
A PLURALITY OF CORRELATED ATTRIBUTE VALUES?
S121
NO
YES
PROCESSING OF DISPLAYING CORRELATED ATTRIBUTE VALUE
S105
PROCESSING OF DISPLAYING CORRELATED ATTRIBUTE VALUES AS OPTIONS
S122
ALL INPUT ITEMS PROCESSED?
S107
NO
YES
RETURN

FIG.22

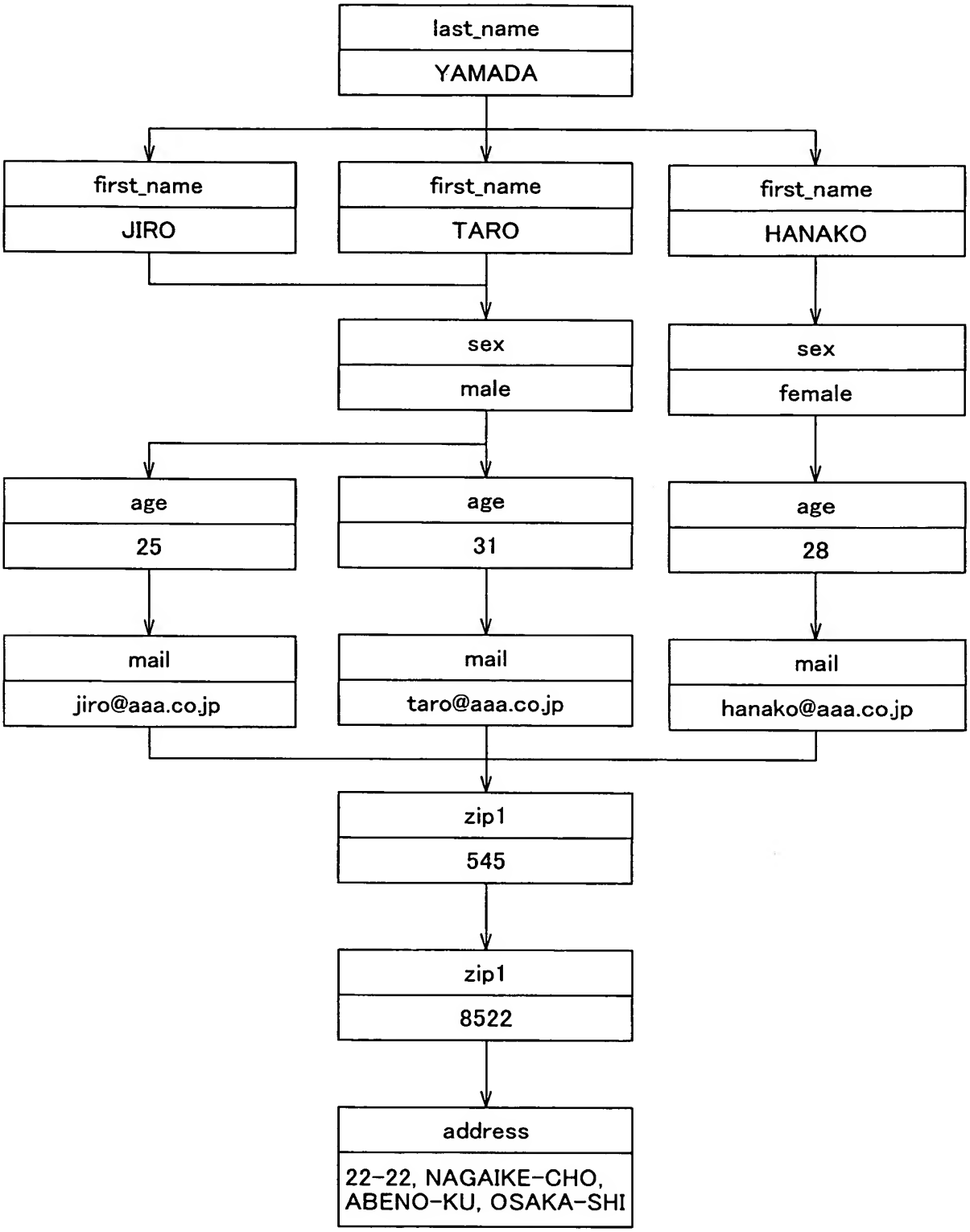
last_name
YAMADA
first_name
JIRO
first_name
TARO
first_name
HANAKO
sex
male
sex
female
age
25
age
31
age
28
mail
jiro@aaa.co.jp
mail
taro@aaa.co.jp
mail
hanako@aaa.co.jp
zip1
545
zip1
8522
address
22-22, NAGAIKE-CHO,
ABENO-KU, OSAKA-SHI

FIG.23

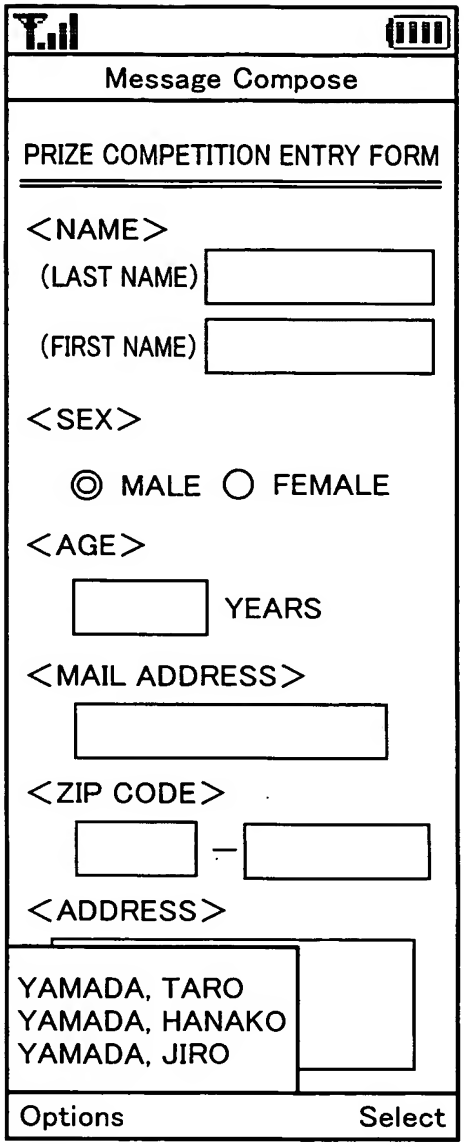
Message Compose
PRIZE COMPETITION ENTRY FORM
<NAME>
(LAST NAME)
(FIRST NAME)
<SEX>
◎ MALE ○ FEMALE
<AGE>
YEARS
<MAIL ADDRESS>
<ZIP CODE>
<ADDRESS>
YAMADA, TARO
YAMADA, HANAKO
YAMADA, JIRO
Options
Select

FIG.24

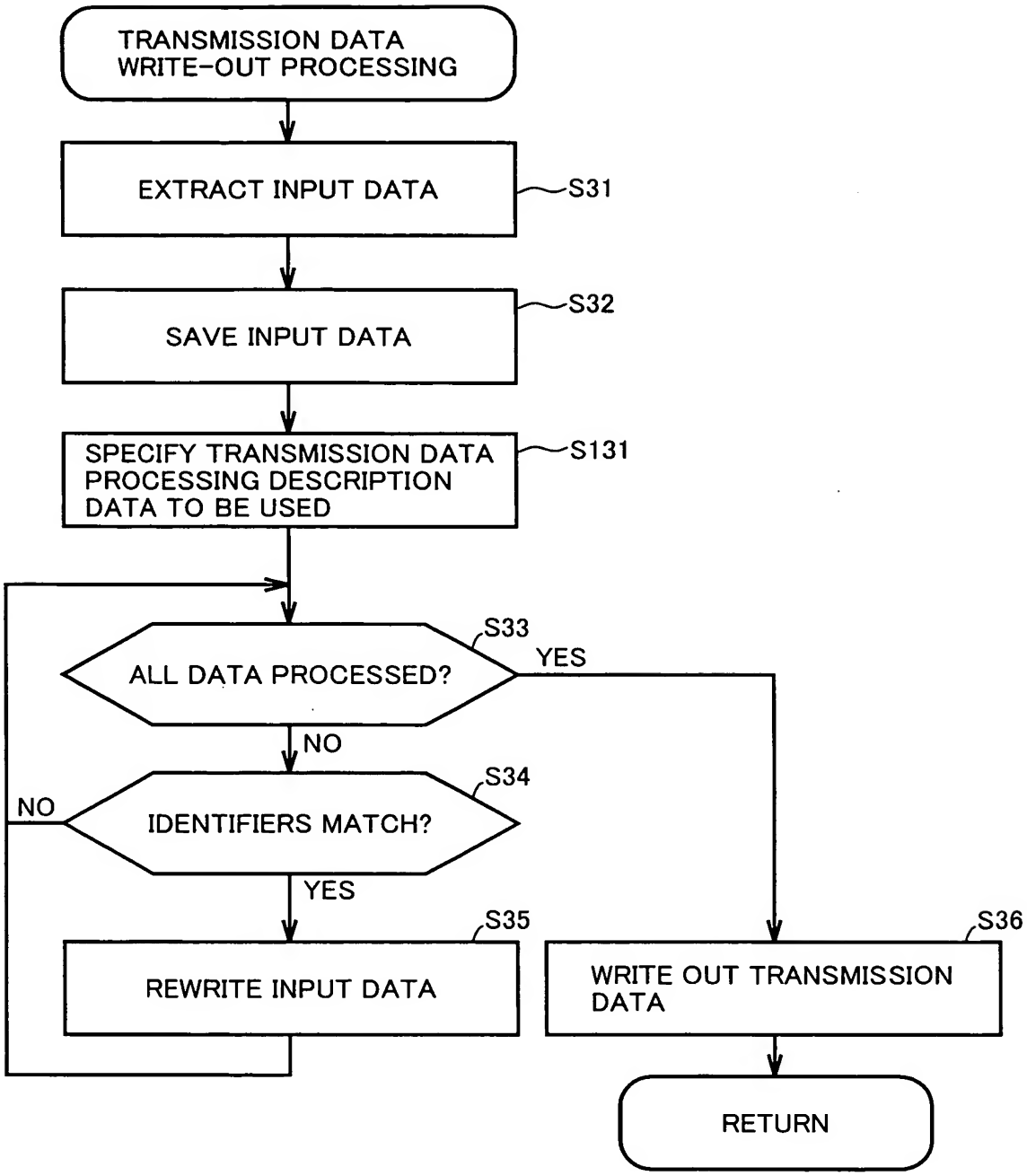
TRANSMISSION DATA WRITE-OUT PROCESSING
EXTRACT INPUT DATA
S31
SAVE INPUT DATA
S32
SPECIFY TRANSMISSION DATA PROCESSING DESCRIPTION DATA TO BE USED
S131
ALL DATA PROCESSED?
S33
YES
NO
IDENTIFIERS MATCH?
S34
NO
YES
REWRITE INPUT DATA
S35
WRITE OUT TRANSMISSION DATA
S36
RETURN

FIG.25

```
1.    <xml>
2.    <registration>
3.      <name>
4.        <last>${last_name}</last>
5.        <first>${first_name}</first>
6.      </name>
7.      <sex>${sex}</sex>
8.      <age>${age}</age>
9.      <mail>${mail}<mail>
10.     <home>
11.       <zip>${zip1}-${zip2}</zip>
12.       <address>${address}</address>
13.     </home>
14.     </registration>
15.   </xml>
```

FIG.26

```
1.    <xml>
2.    <registration>
3.      <name>
4.        <last>YAMADA</last>
5.        <first>TARO</first>
6.      </name>
7.      <sex>male</sex>
8.      <age>31</age>
9.      <mail>taro@aaa.co.jp<mail>
10.     <home>
11.       <zip>545-8522</zip>
12.       <address>22-22, NAGAIKE-CHO, ABENO-KU, OSAKA-SHI</address>
13.     </home>
14.     </registration>
15.   </xml>
```

FIG.27

```
1.  xhtml>
2.  <head>
3.    <title>PICTURE POSTCARD CREATION FORM</title>
4.  </head>
5.  <body>
6.    <form>
7.      <PHOTOGRAPH><br />
8.      <input type="file" name="photo" accept="image/jpg" /><br />
9.      <MESSAGE><br />
10.     <textarea name="message" cols="30" rows="2">
11.     </textarea>
12.   </form>
13. </body>
14. </xhtml>
```

FIG.28

```
1.  <xhtml>
2.  <head>
3.    <title>PICTURE POSTCARD PREVIEW</title>
4.  </head>
5.  <body>
6.    <img src="${photo}"><br />
7.    ${message}
8.  </body>
9.  </xhtml>
```

FIG.29

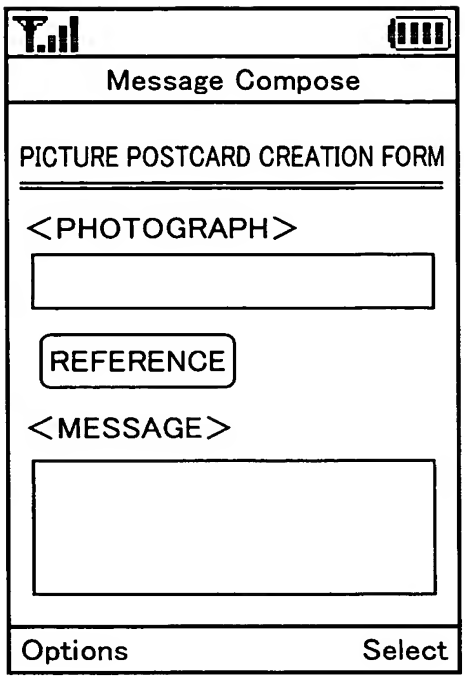
Message Compose
PICTURE POSTCARD CREATION FORM
<PHOTOGRAPH>
REFERENCE
<MESSAGE>
Options
Select

FIG.30

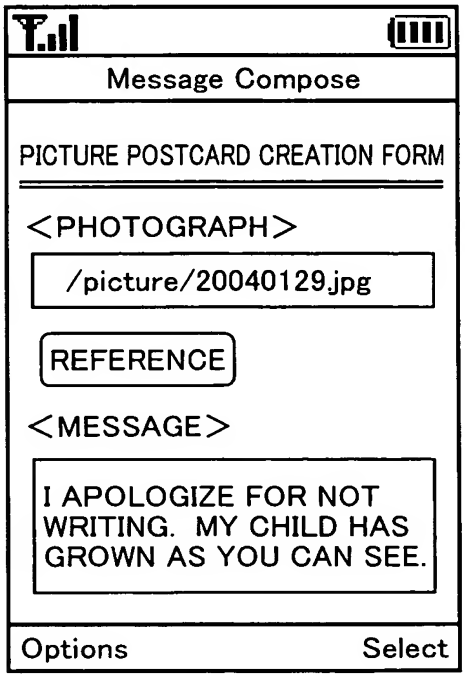
Message Compose
PICTURE POSTCARD CREATION FORM
<PHOTOGRAPH>
/picture/20040129.jpg
REFERENCE
<MESSAGE>
I APOLOGIZE FOR NOT WRITING. MY CHILD HAS GROWN AS YOU CAN SEE.
Options
Select

FIG.31

DATA IDENTIFIER	ATTRIBUTE NAME	TYPE	VALUE
postcard	message	CHARACTER STRING	I APOLOGIZE FOR NOT WRITING. MY CHILD HAS GROWN AS YOU CAN SEE.
	photo	FILE NAME	20040129.jpg

FIG.32

```
1.  <xhtml>
2.  <head>
3.    <title>PICTURE CARD PREVIEW</title>
4.  </head>
5.  <body>
6.    <img src="20040129.jpg"><br />
7.    I APOLOGIZE FOR NOT WRITING. MY CHILD HAS GROWN AS YOU CAN SEE.
8.  </body>
9.  </xhtml>
```